

tech.life@inquirer

Web address

<http://www.phillynews.com/tech.life>

E-mail address

tech.life.inquirer@phillynews.com

Tracking the Net's best

Peruse Top-10 sites, or cast your own vote. Web Winners, F2.



Section F

What's Online	F2
Tech.life@play	F2
TestDrive	F4
Technology in Brief	F4
Tech.life@school	F6

MNW

Thursday, December 31, 1998

Alphabetical index to the past answers in column

Question: From time to time, when a computer problem strikes, I wish I could refer back to earlier FAQ columns to see if you have covered the topic.

I know that these columns are accessible online at <http://home.phillynews.com/volt/faq.asp>

However, individual items are hard to find because the topics covered in each column are not indexed on your Web site.

Can you provide a guide to the topics you have discussed?



John J. Fried
FAQ (Frequently Asked Questions)

Answer: Yes, an index to the columns, back to the first one just a bit more than a year ago, follows.

All dates, by the way, refer to 1998, unless otherwise noted.

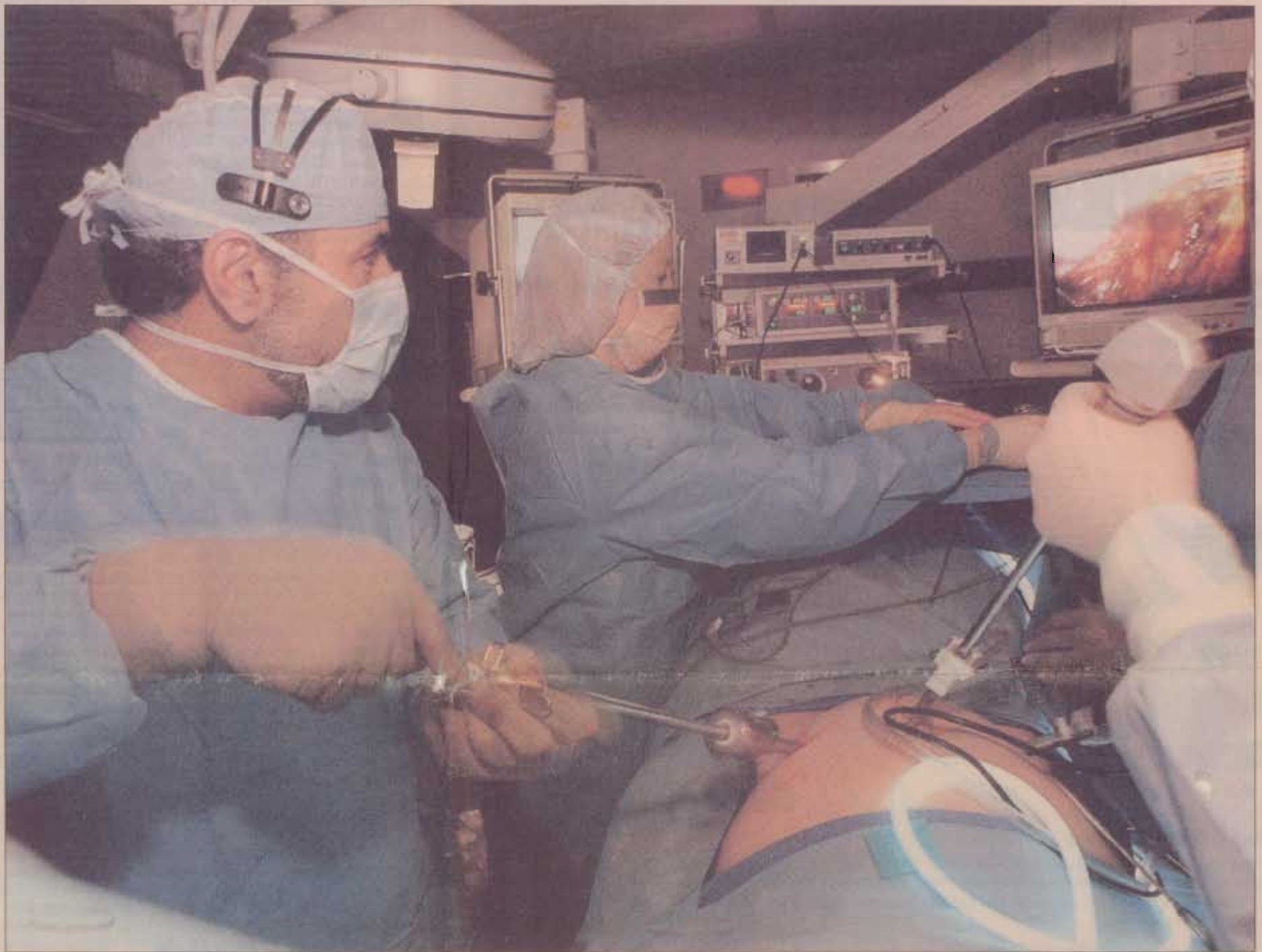
- A.**
- Access and Windows 98, Aug. 27
- Acoustic Couplers, Feb. 5
- Acronyms on Internet, Jan. 22
- Add/Remove utility in Control Panel, May 21
- Adobe Acrobat Reader, Sept. 17
- Advanced power management and computer shutdown, Aug. 23, July 16
- AOL, exiting properly and locality.lst file — Feb. 19
- AOL adapter, July 30
- AOL and ZD University, July 30
- AOL, E-mail programs — July 30
- AOL, removing — Nov. 5
- Associating files with programs, Nov. 19
- Attachments to e-mail, May 7, Sept. 3
- AutoCorrect (Word) and QuickCorrect (WordPerfect), Nov. 26
- Autoran for CDs, Oct. 15
- AutoScan settings — July 2; see also MSDOS.SYS

- B.**
- BackWeb and Compaq Nov. 19
- Boot-up sequence and CMOS, Aug. 6
- Boot-up, step-by-step troubleshooting, June 4
- Bulletin boards, Feb. 26
- Buying a computer, April 16; Aug. 20; see also "How much computer do you need?" Nov. 26, 1998

- C.**
- CAB files, deleting, Dec. 11, 1997
- CDs, music, Feb. 5, 1998
- CD-ROMs for recording, Sept. 10
- Cache (L2), May 14
- Call-waiting, disabling — Oct. 29
- Celeron chip vs. others, Dec. 10
- Close program box contents, Aug. 6
- Closing running programs, April 9
- College, computer for, Aug. 20
- Compaq Presario sound card, March 5
- Connecting on the road, Feb. 5
- CMOS battery, replacing — May 7
- Components, refurbished, in new computers — March 12
- Compressing hard drives, Aug. 20

See FAQ on F4

Suites designed specifically for minimally invasive procedures — using laser and voice technology — are seen as the industry's future.



JOSE MORE / Chicago Tribune

Constantine Frantzides performs surgery using laparoscopic and voice-recognition systems. New technologies require new designs in the OR.

Surgery on the operating room

By Jon Van
CHICAGO TRIBUNE

Though it once was standard for a surgeon to slice open a patient and gaze directly upon the operating field, today the doctor is more likely to slide in a miniature camera, light and special tools through small incisions, and watch the work via television.

The surgeon may even talk directly to the tools, thanks to a new voice recognition system called Hermes.

"Hermes: more pressure," Constantine Frantzides barked into a microphone he wore while performing an operation at Louis A. Weiss Memorial Hospital on Chicago's North Side. The Hermes system increased the gas pressure within the patient's abdomen, acknowledging the command with information displayed on a video screen.

Whether it's called minimally invasive, bloodless or laparoscopic, surgery is enlisting new technology to minimize the

trauma caused by large incisions, thereby reducing pain and recovery time. The trend toward doing more surgery with less cutting and almost no bleeding has gathered so much momentum that some doctors believe it is time to reinvent the basic design of operating rooms to accommodate a fundamental technological shift.

Frantzides is one such advocate, and he has put his ideas into practice at Weiss Hospital, where he has worked with industry vendors to create a technologically advanced operating room.

In Frantzides' OR, television monitors and much other high-tech apparatus are suspended from ceiling-mounted booms that can be swung from one position to another as needed without interfering with the surgeons and nurses gathered around the patient.

A most fascinating feature is Hermes, which enables the surgeon to speak directly to the equipment to order technical adjustments.

The surgeon can instruct the system to pump more carbon dioxide into his pa-

See OPERATING ROOM on F2



A microphone is part of Constantine Frantzides' surgical attire.

High-tech equipment leads to new designs for the operating room

OPERATING ROOM from F1
tient's abdomen to keep it open and visible to the video camera, ask for the lighting to become brighter, or tell a white pointer-arrow on the TV screen to change positions.

Frantzides, who directs minimally invasive surgery for the University of Chicago hospitals, did all this and more on a recent morning as he was repairing a patient's hernia.

Besides deftly manipulating the patient's tissue to repair the hernia, Frantzides provided a running commentary for the benefit of surgical residents assisting him. Like a football coach, he used the white arrow on the TV screen to point to parts of the patient's anatomy, name them, and explain his repair strategy.

Some might regard use of voice commands instead of just reaching over to twist a knob as excessive

gadgetry, but that's not the case, said Joan Cahill, laproscopic surgery coordinator at the University of Chicago and Weiss.

In a traditional operating room, twisting dials usually requires the coordinator to reach over the patient to a hodgepodge of equipment stacked on a portable cart. Some coordinators may be unfamiliar with the equipment's settings, and touching anything in an OR can compromise the setting's sterility and is best avoided if possible.

"Making those adjustments as the surgeon requests them means that I'm not able to handle other jobs," Cahill said. "It could mean having to put another person into the operating room."

Automating the process cuts the time spent setting up the room for an operation, which, in turn, cuts

costs, Cahill said.

The Hermes system, which was supplied to Weiss by Stryker Endoscopy Inc., based in Santa Clara, Calif., requires that each surgeon who uses it spend time training the machine to recognize his or her voice. Once that is done, a computer disk of each surgeon's specific voice software is inserted into the machine when he or she uses the operating room.

Tony Furjanic, Stryker's Chicago representative, said the company regards surgical suites designed specifically for minimally invasive procedures as the industry's future. His firm has installed equipment in about 250 such suites, Furjanic said.

"We call them endosuites," he said. "About half of general surgery procedures are now being done laproscopically. When you roll equip-

ment needed for these procedures in and out of operating rooms on carts and bang it around, you get more equipment failure. It makes sense to design ORs to accommodate the new equipment."

Berchtold Corp. of Charleston, S.C., a supplier of surgical power booms, cameras and lighting equipment, also helped build the Weiss operating room.

Andy Reding, Berchtold's marketing director, said that while the concept hasn't yet gained wide acceptance, "it's definitely becoming more common. Most of the operating rooms available today were built 20 years ago or based on 20-year-old ideas. That just doesn't take

into account all the new technologies surgeons are using today."

Frantzides is a pioneer in promoting low-cut surgery, and has adapted eight traditional procedures to laproscopic technology.

While he has often encountered opposition from older surgeons who are emotionally wedded to open field procedures, Frantzides has no doubt that time is on his side.

"We'll soon see a generation of surgeons who were raised on Nintendo," said Frantzides. "I know that when I play computer games against my son, there is no way I can beat him. There's no doubt that

Many operating rooms are 20 years old or based on ideas of that era.

these young people coming up will be more comfortable with minimally invasive techniques than any of us who learned the old way and adapted to the new."

And while all this makes sense and supports the notion that the technology is laudable, there still lingers a possibility that surgeons really like this stuff because it's just neat and strokes their egos. The Hermes system doesn't dispel that.

At the conclusion of an operation, Hermes is programmed to announce to the operating room that "you're a great OR staff" and tell the surgeon that he is wonderful as well. A smiling Frantzides demonstrated the option of surgery's equivalent of canned applause and said: "Why not? It makes everyone feel good."